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**Kwong et al.**

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(54) **USE OF PHOSPHATES TO REDUCE SLAG  
PENETRATION IN CR2O3-BASED  
REFRACTORIES**

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501/103, 105

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(57) **ABSTRACT**

A high-chromium refractory material that provides  
improved resistance to coal slag penetration is presented.  
The refractory mixture comprises a blend of chromium  
oxide, aluminum oxide and phosphates. The refractory mix-  
ture may be blended with an aggregate and cured. In  
addition a phosphorous oxide may be blended with chro-  
mium oxide and aluminum oxide and additionally an aggre-  
gate. The refractory mixture reduces the rate of coal slag  
penetration into the surface of the cured refractory.

**17 Claims, 3 Drawing Sheets**

**(3 of 3 Drawing Sheet(s) Filed in Color)**